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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/804,323      | 03/12/2001  | Horst Belau          | GR 98 P 2544 P      | 1014             |

7590 01/31/2002

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EXAMINER

CUNEO, KAMAND

| ART UNIT | PAPER NUMBER |
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2827

DATE MAILED: 01/31/2002

Please find below and/or attached an Office communication concerning this application or proceeding.



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9804323

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|--------------------|-------------|-----------------------|------------------|
| APPLICATION NUMBER | FILING DATE | FIRST NAMED APPLICANT | ATTY. DOCKET NO. |
|                    |             |                       |                  |
|                    |             |                       | EXAMINER         |
|                    |             |                       |                  |
| ART UNIT           |             | PAPER NUMBER          |                  |
|                    |             |                       |                  |

DATE MAILED:

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

### OFFICE ACTION SUMMARY

- ☐ Responsive to communication(s) filed on \_\_\_\_\_
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3mo month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

#### Disposition of Claims

- ☒ Claim(s) 1-7 is/are pending in the application.
- Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☐ Claim(s) 1-6 is/are rejected.
- ☐ Claim(s) 7 is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

#### Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. § 119

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been
- ☐ received
- ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

- ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e).

#### Attachment(s)

- ☒ Notice of Reference Cited, PTO-892
- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) 5
- ☐ Interview Summary, PTO-413
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

**DETAILED ACTION**

***Priority***

1. Applicant is hereby notified that the German document 19841459.5 has not been established as the foreign priority document because mention of it is not made in the declaration. Further, no copy of this document is received.
2. Applicant is hereby notified that PCT/DE99/02785 has been recognized as the parent case. Nevertheless, a copy of this document has not been received. Please send a copy of this document.

***Drawings***

3. The drawings filed 3/12/01 are accepted and approved by examiner, except for the matter below.
4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the second outer layer with the conductors, ground tracks and pins, as described in claim 7, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

***Treatment of Claims Based on Prior Art***

5. 35 USC 103(a) states:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Obviousness under 35 USC 103(a) is determined against a background established by the factual inquires set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), which are summarized in items 1-4 below.

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 USC 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 USC 103(c) and potential 35 USC 102(f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1-6 are rejected under 35 USC 103(a) as being unpatentable over Gentry (US 4644092), Osifchin et al. (US 3093805, hereafter Osifchin) and Kobayashi et al. (US 6040524, hereafter Kobayashi).

Claims 1, 4: Gentry discloses board (22) in figure 5 with conductor tracks (16), attached to pins (26) at the edge of the board and shield (14) on surface (24). Gentry discloses the claimed invention except for disclosing that the conductor tracks are alternated with ground tracks and are connected thereto with capacitors.

Osifchin and Kobayashi disclose conductor tracks (14) and (112a,b,c) alternating with ground tracks (14) and (114), see the cover figures. Furthermore, it is well known to attach ground and conductor tracks with a capacitor to reduce parasitic capacitance in the signal.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to alternate the conductor tracks of Gentry with ground tracks, as taught by Osifchin and Kobayashi, and to attach capacitors between the two tracks, for reduction of noise in the signal carried by the conductor tracks, because these practices for reduction of noise are old and well known in the art.

Claims 2-3: Please note that the ground tracks are connected to the shield layer with through holes.

Claims 5-6: The shield covers the tracks from side-to-side and the outer tracks are ground tracks.

#### ***Allowable Subject Matter***

8. Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art does not fairly suggest the second outer layer with all of the conductor, ground and pin features.

#### ***Related Prior Art***

9. The following references are considered pertinent to the present application.

Murphy et al. (5274195) and Noro et al. (5384432) disclose boards with tracks and projecting

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pins.

*Closing*

10. Any inquiries related to the examination of this application should be directed to Ex. K. Cuneo at (703) 308-1233 or her supervisor SPE D. Talbott at (703) 305-9883. Inquiries of a general nature should be directed to the receptionist of Group 2800 at (703) 308-0956. The fax numbers for Group 2800 are (703) 308-7722 and 7724.



K. Cuneo  
Primary Examiner  
January 26, 2002